

Excerpts from Commencement Address
by
Barbara S. Uehling,
Chancellor, University of Missouri-Columbia
THE OHIO STATE UNIVERSITY
March 20, 1980

This is an especially significant time to be graduating, here at the beginning of a decade when there's so much talk of the future. When we are reflecting and introspecting as a society about ourselves we're asking: who are we, where are we going, what influence do we have on ourselves and on others in the world, what should we become, and how do we get there?

Education is one if not the most significant enterprise of any society. Today I'd like to talk for a few minutes about education as it reflects that society and as it leads it.

The educational mission of any society always does reflect it. It says something about the state of knowledge which has been reached, about the concerns which are worthy of public attention, and something about the trust that individuals in that society have for other individuals--can they be trusted with ideas and with freedom and with the advancement of knowledge?

However, education also should lead a society in defining what's important, what we should be thinking about and what problems lie ahead. I also want to talk about education today because not only have you been participants in it for these last --how many?--years, but you are going to be the most important

(more)

Page 2

people in the future to shape what education can be and should become.

Education in the United States is a vehicle for the transmission of knowledge, and that starts very early. It's also a vehicle for the development of technology and new knowledge. It's a sanctuary, a place where ideas can be brought forth and discussed and given haven. But most of all, it is our enterprise for the development of human potential. Its integrity, its soundness are essential to a society. In fact, it's like a living organism that must be kept sound and whole, even though conditions around it are constantly changing.

I'd like to talk for a few minutes about some of the special concerns of education, and I'm intrigued by this analogy to a living organism, so if you will allow me, I'm going to talk about it in terms of three biological functions -- generating, maintaining and adapting.

Generation means literally bringing into being, and in education it suggests birth, life and vitality. It includes the generation of ideas of technology, of knowledge, but most of all, an environment for growth, for that release of human potential I talked about. Education must generate an environment in which students like yourselves can have the best possible preparation for the world.

There are lots of pressures on us as administrators today to train students--and lots of pressures from you as students and from your parents--to train students in technical, practical

(more)

fields. Employers demand that students know how to program a computer. The world is demanding that we learn how to treat cancer. There are also demands for answers to questions which have already been formulated but not answered, such as: how can we reduce the use of hydrocarbons for fuel, how do we prevent cancer as well as treat it? Yet as important as any of these questions are, they are not as important as some others which need to be answered, like: What happens to the information which is generated by that computer? Who has the responsibility for its use? How can we prevent disease throughout the world, not just a single disease? How are we going to handle inflation, and what about this problem of terrorism that we're all talking about and becoming more and more aware of? We need to be able to answer questions which contain moral and ethical values and to address those areas in which the questions haven't even been formulated.

Education surely must help by providing that technical knowledge, but it must also help by pressing ahead in the other areas. We need to do that by generating an environment in which students can understand how individuals in the past faced not identical but not unlike conditions. Those individuals had to look at areas in which questions had not been asked; they had the problems of defining them, of finding out how to answer them, of often failing to answer them, and they had the persistence to go back time and time again. These are the things which you have learned in this institution--not just the technology, not

(more)

just the discipline, but a way of approaching a future which surely must seem a little scary and certainly ambiguous.

Education must generate also in another way. In addition to that environment I've been talking about, which can help develop human potential, education has to generate knowledge which will advance the society. It must do so by a collection of people working together. In the biological world, collectives work together. If you look at termites sometimes, you find two or three of them that seem to be wandering around in a chamber carrying pellets; nothing's happening, and it seems haphazard. Then if you watch more closely, those termites begin to come together. Suddenly you see columns appearing, and then chambers. That's exciting. Something happened because there's a collection of activities.

We have the same thing with professors. They become agitated about an idea, they are restless, they may talk to their colleagues. Their colleagues may think they are behaving a little strange, they may even not sleep very well at night. But finally the excitement catches on, students and colleagues are brought in, and finally we have a fabric of ideas being woven together so that new knowledge can be generated.

This interdependence of human beings is a phenomenon we have not paid very much attention to lately, particularly in the academic environment where it's so essential to the production of ideas and new knowledge. We tend to revere the academic institution as a place in which people can work in isolation and

(more)

in which each faculty person is given the freedom--and we treasure that freedom--to speak in the classroom. Yet that faculty member can profit also from an environment in which we reward collective activity and mutual growth, and we must in the future foster that kind of environment.

A second function of biological organisms is maintenance. An organism grows and it generates, but it's equally important that what is generated be maintained. In education, and indeed in society as a whole, maintenance is not a natural function as it is in biology. In fact, we have to work very hard at it. That's probably true because in our society there's so much drama and focus associated with starts. The start of life--birth--is exciting. The start of a marriage is what we emphasize. Even commencement, while it's the end of a period for you, a very important period, it is the beginning of another one, and we emphasize that beginning. In education we emphasize new programs, new faculty, new buildings. The emphasis is always there on the starts, but sustenance is equally important. To sustain, a biological organism finds food, ingests it, metabolizes it and gives off waste. A society must do the same thing. Even education, as one of the enterprises of society, must do that. There's enough emphasis in education on the acquisition of resources. I think there we can very much picture ourselves like a biological organism going out on the hunt for food--we're constantly on the hunt for resources. We devote great attention to how much tuition should be, tuition and fees, and

(more)

how much should come from the legislature, how much from donors, what's an appropriate mix, how are we going to win in the future, and how much from the federal government. Those are important questions.

We have in biology a tendency to believe that as the organism grows and matures, its needs are going to level off. I know that your parents are very sympathetic with that because having raised adolescents, they could hardly wait till the grocery bill began to decrease slightly because you were eating so much. We might expect the same thing to be true of education, but it's not that simple. In fact, I don't believe our needs are going to level off as much as we might anticipate with fewer 18-to-21-year-olds. I think needs are not going to level off because we have some special kinds of concerns.

One of those concerns has to do with deferred maintenance. In my opinion, one of the major problems that will be facing us in education in the future is our physical plants, which we have allowed in many instances to run down and not be maintained. I read recently about buildings in the East that were being closed, not because they weren't needed, but because the budgets hadn't been allowed to maintain those buildings.

It's true that we're not going to be adding lots of faculty, but that doesn't mean we should not be spending resources for our faculty and staff. They will want to continue to do exciting things. It's not easy to stand in the same classroom for 20 years. It's not easy to look out at the same like group of

(more)

students each of those 20 years. We need the resources to help our faculty remain vital and interested and current and alive about what they're doing. We also are going to have continuing needs to relook at our programs so that we can meet a very different and changing society.

Once we've acquired these resources, we have the more important problem of how to utilize them effectively. A biological organism, if it gets less food, doesn't decide not to feed one part of the body. It goes on distributing the resources appropriately; everything suffers accordingly. In education we don't have an automatic process to do that and so we're very inclined to let certain portions get fed selectively. That's not bad; that's probably good, but the way in which those choices get made is not always very good. Thus we may find that pressures from legislators, strong groups of faculty members or even alumni can help shape our programs. You yourself in a decade just might be guilty of coming back and saying: Hey, things aren't like they used to be. Why don't you have that program in accountancy, or why haven't you added such and such? You may find yourself falling into the trap of saying we need more resources in that field in which I'm interested. But we in education must protect what is good and maintain a balance. That's going to be particularly critical through this next decade.

Just as a biological organism must dispose of waste products, we in education have the responsibility of disposing of what's no

(more)

longer useful. The first thing that comes to my mind is a room full of equipment on our campus which hasn't been used in the last 20 years but which people want to hoard and hold on to. Now, some of that just needs to be put aside. However, we also have more complex problems, such as how to decide when to get rid of old space, when to renovate it and when to renew it. We face even more difficult problems when we come to the very humane questions of how to dispose of personnel who may not be as useful as we would like. Those are very difficult problems that will face us in the future, problems that should be handled with great care and humanity, but always with the conviction that education must remain sound and whole.

A third biological function is adaptation. Even an organism that's functioning healthfully and automatically will sometimes find predators or a changing environment, and it has to respond. An institution such as education, or even our whole society, is in the same condition. It may be functioning healthfully and soundly in one instance, but conditions change so rapidly that it must adapt. This need raises very important questions for education as an enterprise. Just how much should the institution adapt, and how can it? Even cells adapt. A cell will fuse under the right conditions with any other cell. There's a quote from The Life of the Cell: "There are tendencies for living things to join up, establish linkages, live and fight each other, return to earlier arrangements, get along wherever possible. This is the way of the world." It suggests that the

(more)

world has functioned by adapting. Does that mean that institutions should adapt to the extent that they give credit for cake-decorating courses? Or that they should ease up on grades for traditional courses? Or that they should adapt by emphasizing athletics because that's what everybody wants? Those are all important questions which each institution must answer. Still it's important that even in cell fusion, the cell doesn't give up its identity, and education as well must hold onto that core which we value and makes us whole. We must adapt, but we can meet the changing needs of our society without sacrificing integrity.

If a biological organism doesn't function appropriately, intervention can occur in any one of these functions. That intervention may be either constructive or destructive. The same thing is true with education. If the enterprise is not fiscally sound, if it's not fulfilling its basic purpose, if it's not appropriately responsive to the needs of students or to the society that's supporting it, if it's not appropriately responsive to the needs of minorities and protected groups, we indeed may find interference from above. The evidences of regulation which so many administrators are bemoaning are present, but I can't help think that some of those, if not all, exist because we as an enterprise in our society have not been appropriately adaptive. We didn't anticipate the needs of significant groups of people. Even Title IX might have been avoided if we had adequately anticipated the needs of women for

(more)

participation in athletics. Certainly some of the bureaucratic procedures in which we all engage connected with affirmative action could have been avoided had we been responsive much earlier to a significant and important need of a large segment of this population. If we don't do our job, we may in fact find ourselves subject to even more intervention. We also find very often that intervention exists if there's a mechanism there for it. Even an automatic biological response can be conditioned and placed under the control of an organism by operant conditioning techniques. (I'm a psychologist--I have to get some psychology in here). I was fascinated by some of the early experiments in which even rats could begin to control autonomic responses. They could dilate the size of the blood vessels in their tails. I thought that was really dramatic, in fact it's just marvelous that that kind of control exists. Yet who wants the responsibility? If it were left up to me to remember to monitor my heart rate, I would have been dead a long time ago because I just can't be responsible for such detailed decisions. Yet as an administrator (I'll talk about myself: I wouldn't talk about others in this room), as an administrator, I may very easily fall into the trap of wanting to control just because a mechanism for control exists. I may find myself tempted to tell a department chair whom he should hire. I won't do it, believe me, but I might be tempted to if there's a structure through which it's easy for me to do so. Instead, what I should do is try to provide understanding of what the

(more)

total institution is about so that people who are making decisions can make them in a direction which will point us in the same way. Now, I've talked about myself because that's easier, but we can also apply this to control which comes from above. If we as a society set up procedures for control, if we try to control education and that mechanism exists, then I guarantee you, it's going to be utilized. We have to be careful and watchful not to set up those mechanisms for control if in fact they are going to deprive individual people of taking the responsibility for their own actions.

Education is great. I think you can tell that I'm a supporter and an enthusiast. In fact, I would say it's absolutely essential for the maintenance and progress of a society. It must be sound; it must have integrity. We must continue to provide an environment in which there can be a generation of ideas and in which information can be gathered and collective effort encouraged. We must also give careful attention to the self-maintenance of education, so that we can enhance what's necessary and good and do so more effectively and efficiently all the time.

Education as an enterprise must be adaptive to the needs of its clients, students, alumni, parents, taxpayers and employers, for it is our hope for the future, the only means by which maximum development of human potential can occur. You have benefited by it. Look back on what you were when you entered this institution, and think of the changes. You are

(more)

Page 12

the beneficiaries of this process, your lives have been significantly altered by participating. Now you can benefit education in turn by continuing your interest and your understanding, by participating in decision-making regarding it, and by protecting the process and the institutions of education so that they may remain free, responsive and valid.

#